

JTC Freight Investment Study

Fourth Policy Group Meeting & JTC

presented to

**Joint Transportation Committee &
Freight Policy Group**

presented by

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Transportation leadership you can trust.

Agenda

- **Summary of alternative freight revenue sources (Task 8 Report)**
- **SR 509 benefits analysis and project funding portfolio**
- **SR 167 benefits analysis and project funding portfolio**
- **FAST Corridor projects benefits analysis and project funding portfolio**
- **Findings, consequences, and policy options**
- **Next steps**

Overview of the Study

Review of Study Tasks

- 1. Evaluate Existing & Potential Funding Incentives
- 2. Analyze Current Industry Taxes & Fees
- 3. National & International Comparison of Freight Funding
- 4. Assess Non-Freight Funding Sources
- 5. Measure Economic Impact of Funding
- 6. Assess Diversion of Marine Cargo
- 7. Measure ROI of Freight Infrastructure Completed
- 8. Examine Other Potential Project Specific Fees Underway
- 9. Recommend a Project Recommendation Body
- 10. Supplemental Work Tasks
- 11. Stakeholder/Legislator Groups

Alternative Freight Revenue Sources

Task 8 Report

Option 1

Re-direct freight-related revenues to freight-only projects

Option 2

Raise existing taxes or fees

Freight specific

Non-freight specific

Option 3

Implement new taxes or fees

Freight specific

Non-freight specific

Increase Existing Freight Related Sources Biennium 2007-2009 (Millions of \$2007)

**Option 2
Increase**

Combined License Fee
(6% increase on a base of \$40 to \$3,402)

\$21

Special Fuels Tax
(Indexed at 6% 37.5 cents per gallon)

\$19

\$0 \$100 \$200 \$300 \$400 \$500 \$600 \$700

New Freight Related Revenue Sources Biennium 2007-2009 (Millions of \$2007)

Option 3
New Sources

MVET from Trucking
(Reinstate a 1% of vehicle value)

\$230

Cargo User Fee on Imports
(\$30/TEU)

\$86

Bulk Fee
(\$0.20/Ton)

\$5

Heavy Truck VMT Fee
*(16 cents per mile)**

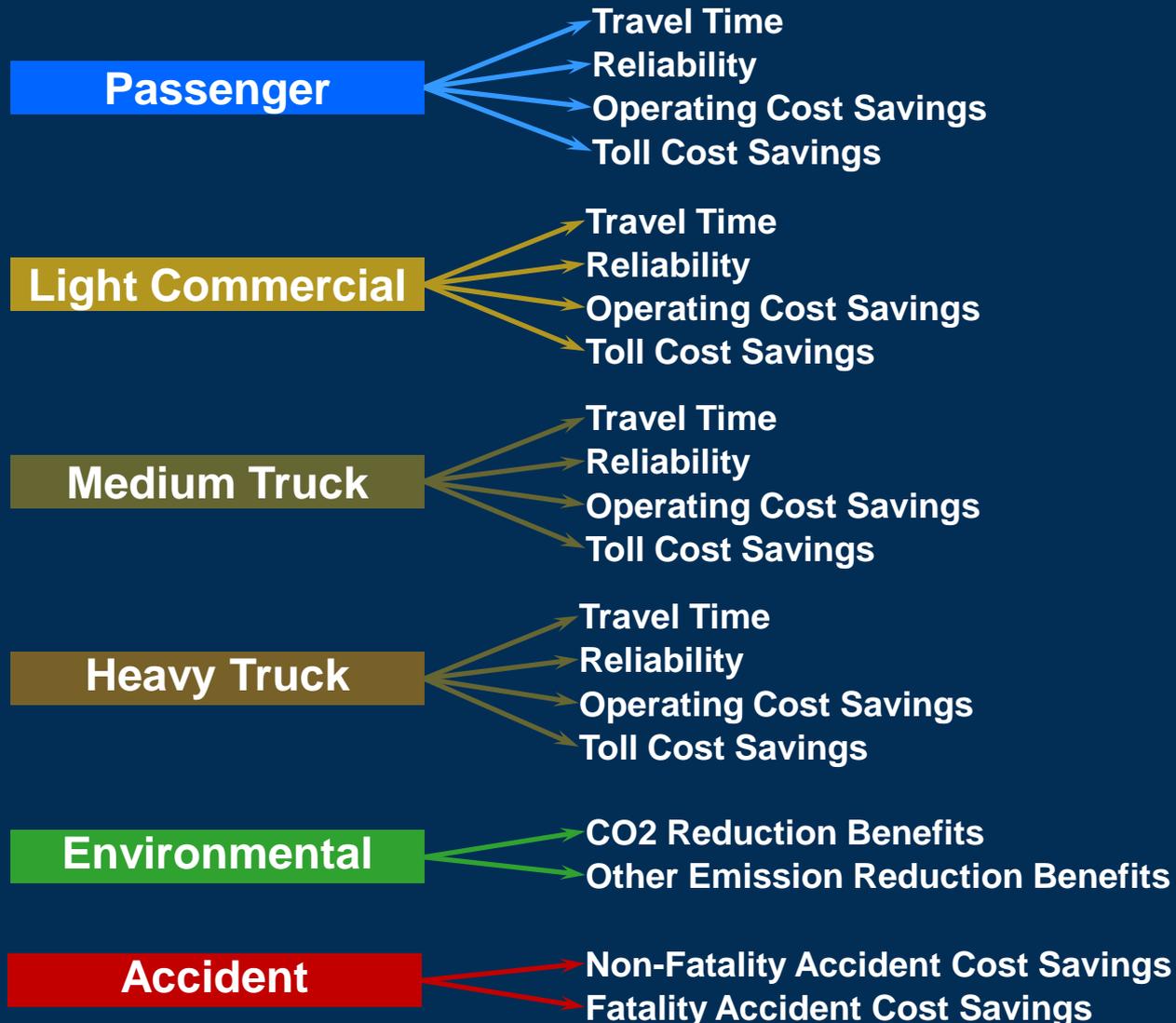
\$453

\$0 \$100 \$200 \$300 \$400 \$500 \$600 \$700

Note: *Truck VMT rate same as Germany

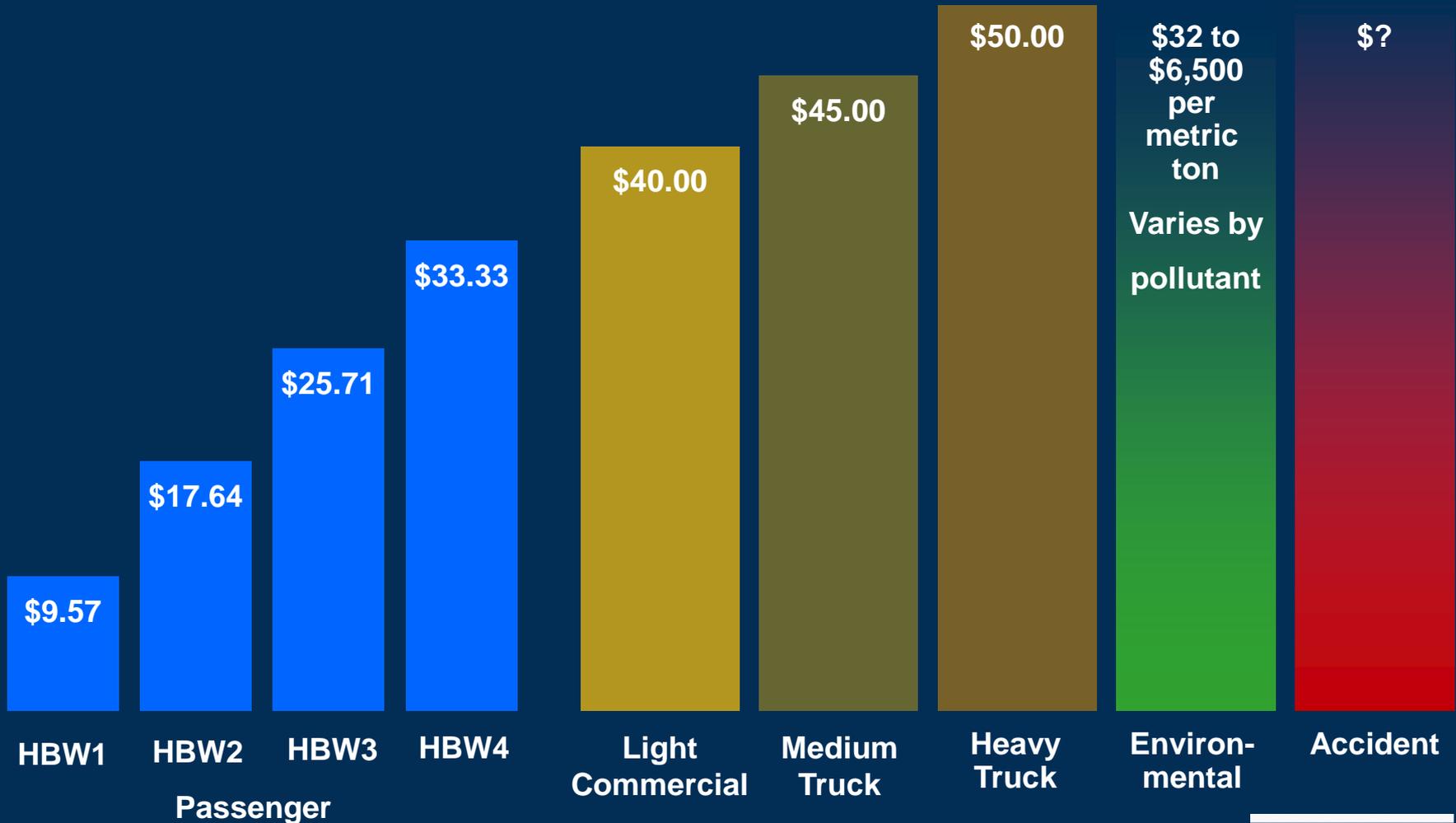
Project Benefit Analyses

Detailed Project Benefits (Millions of Current Dollars)

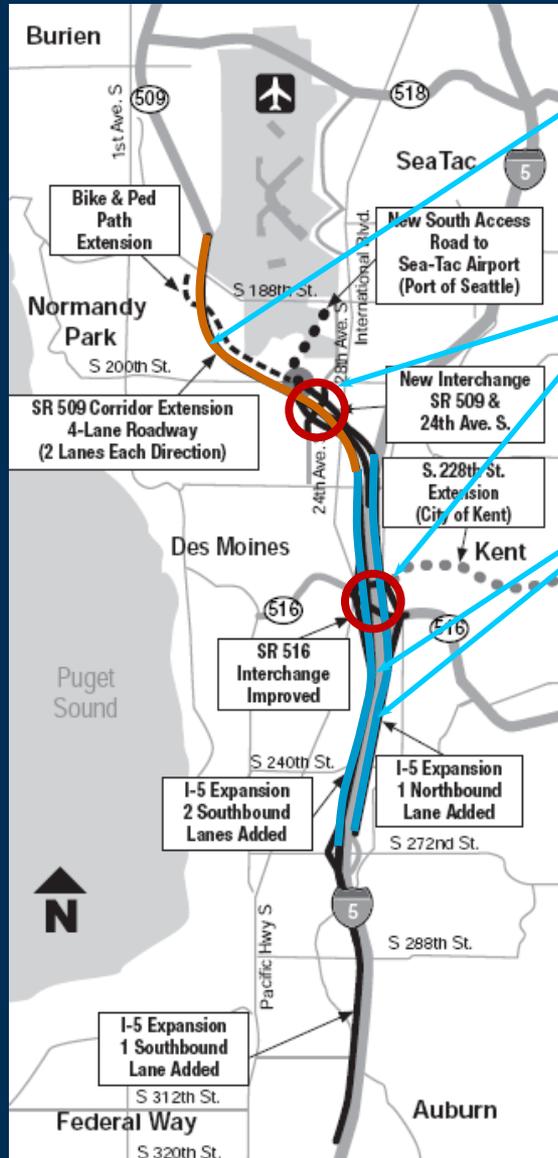


Project Benefit Analyses

Value of Time (Year 2000 Dollars)



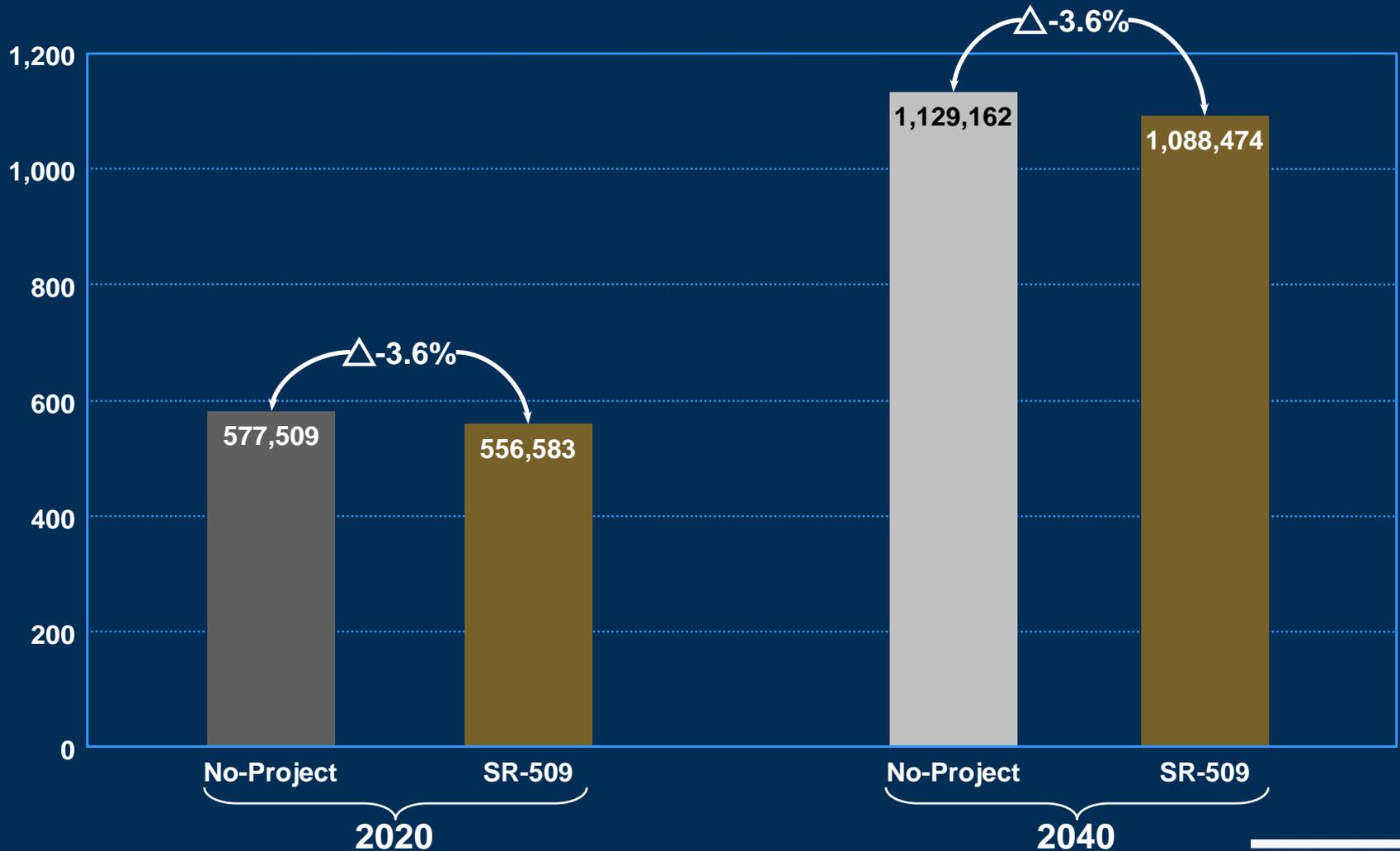
I-5/SR 509 Corridor Completion Project Description



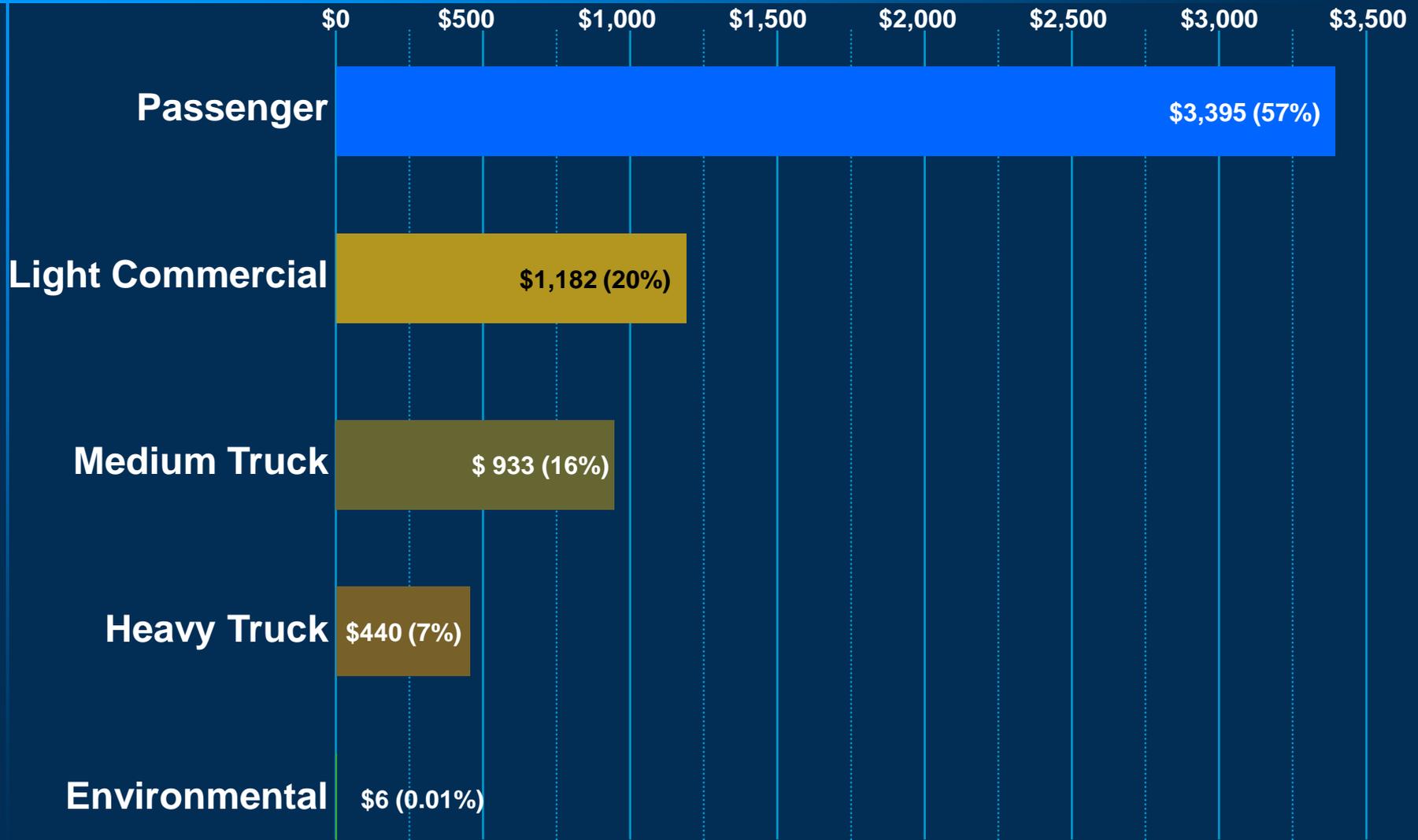
- Completes SR 509 corridor with three-plus miles of new freeway
- Includes new SR 509 interchange access
- Includes new lanes on I-5 between S. 210th and S. 272nd Street vicinity
- Listed as priority freight project in:
 - Legislative Budget
 - FMSIB List
 - Regional Blueprint (RTID)
 - WA Transportation Plan

Performance of SR-509 in 2020 and 2040

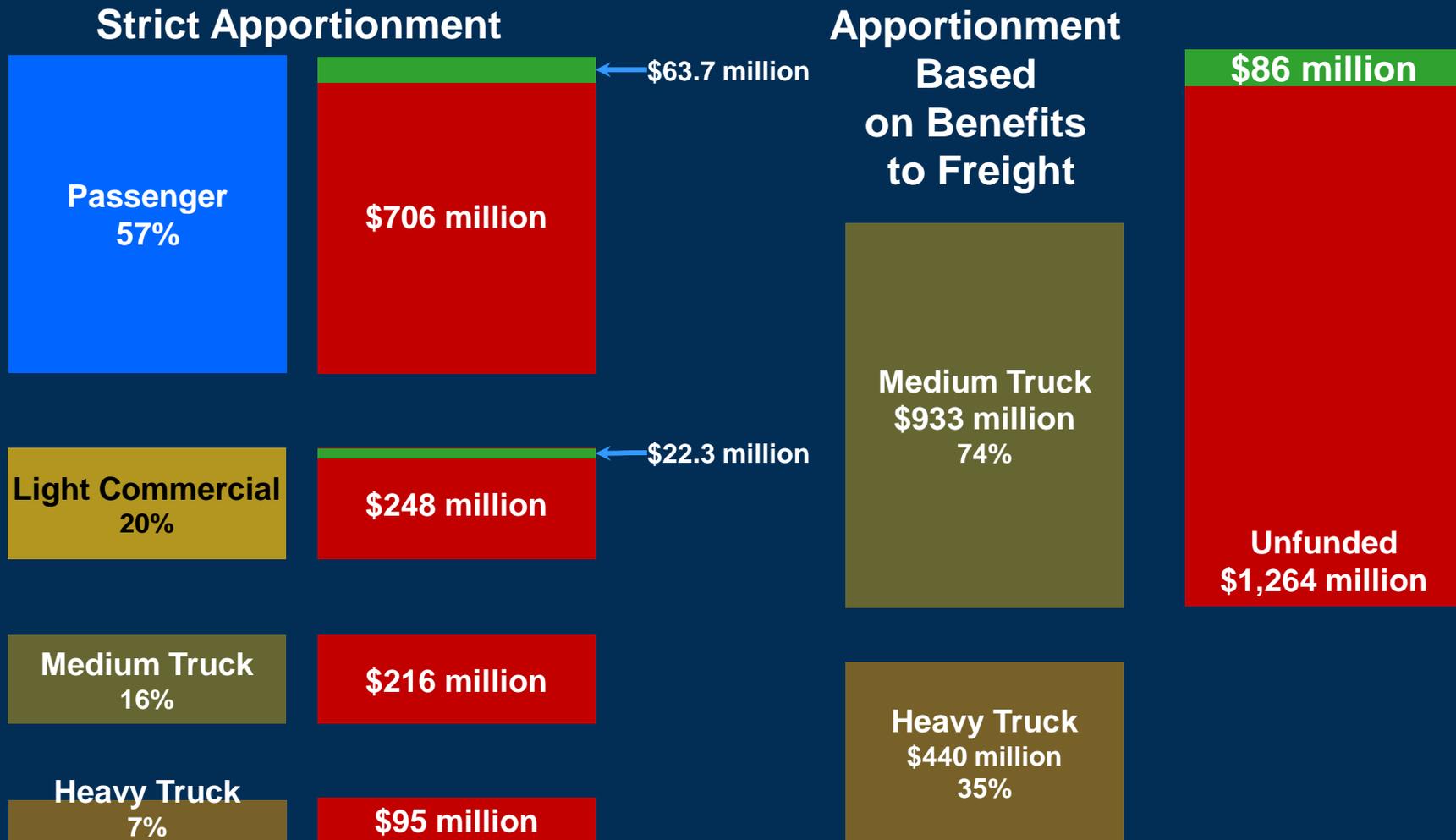
Average Daily Vehicle-Hours of Delay



I-5/SR 509 Corridor Completion Project Benefits (Millions of Current Dollars, 2021 - 2050)



I-5/SR 509 Corridor Completion Possible Funding Scenario



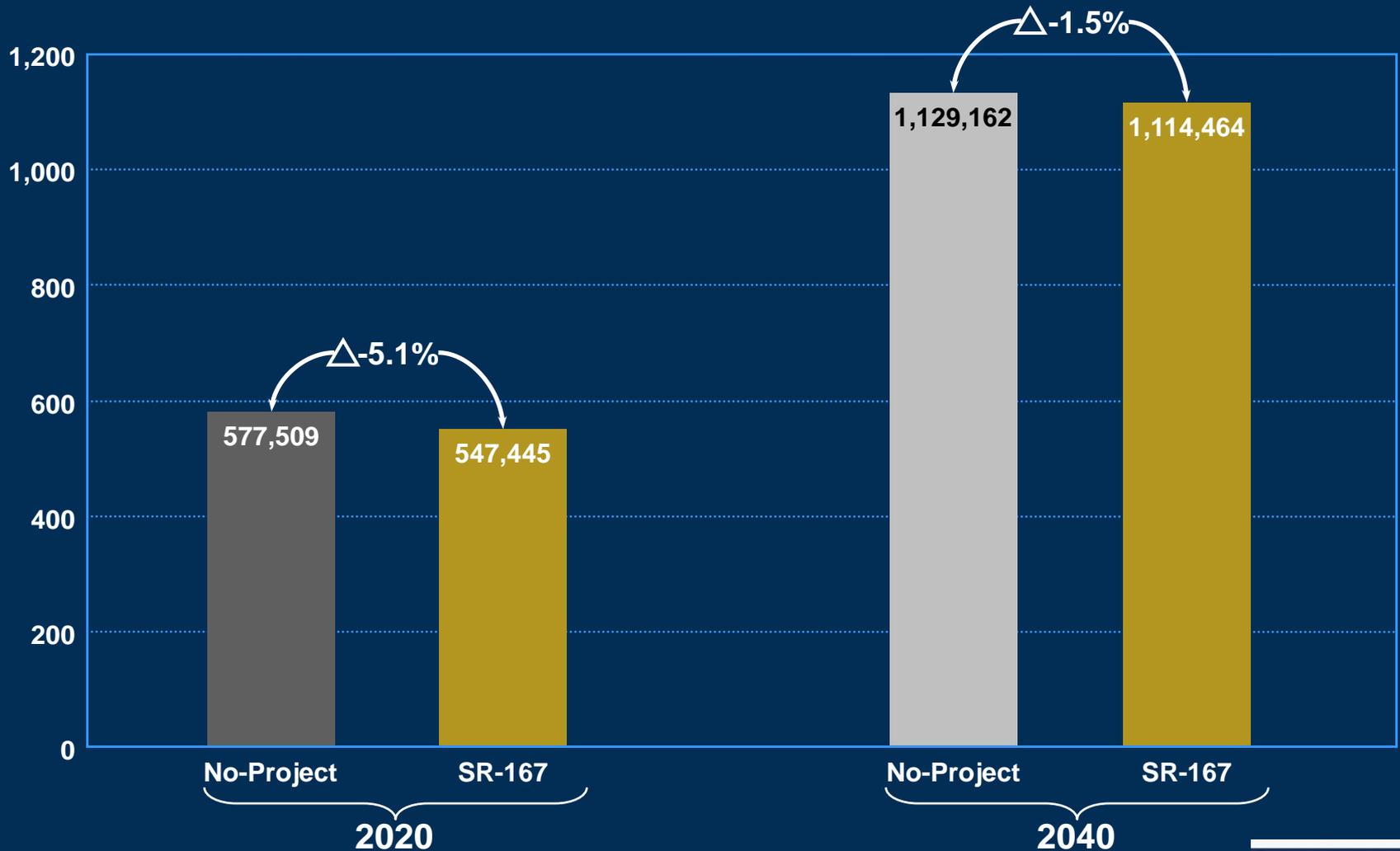
SR 167 Extension Project Description



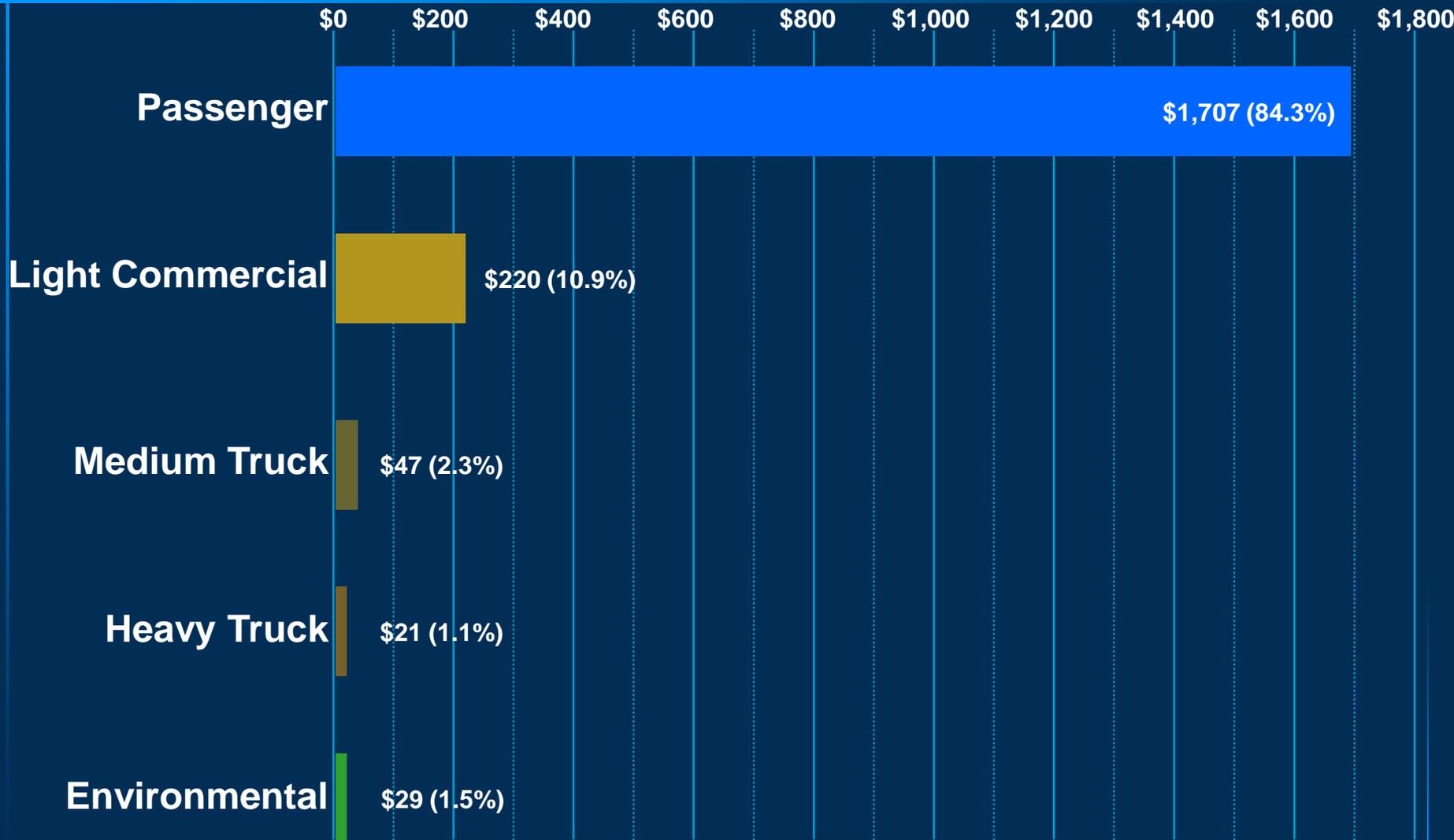
- Two miles of 4-lane highway between SR 509 and I-5
- Four miles of 6-lane highway between Puyallup and I-5
- Interchanges at SR 161, Valley Ave. E, Interstate 5, 54th Ave. E and SR 509 .Two weigh stations and two park and ride lots
- Listed as priority freight project in:
 - Legislative Budget
 - WSDOT
 - FMSIB

Performance of SR-167 in 2020 and 2040

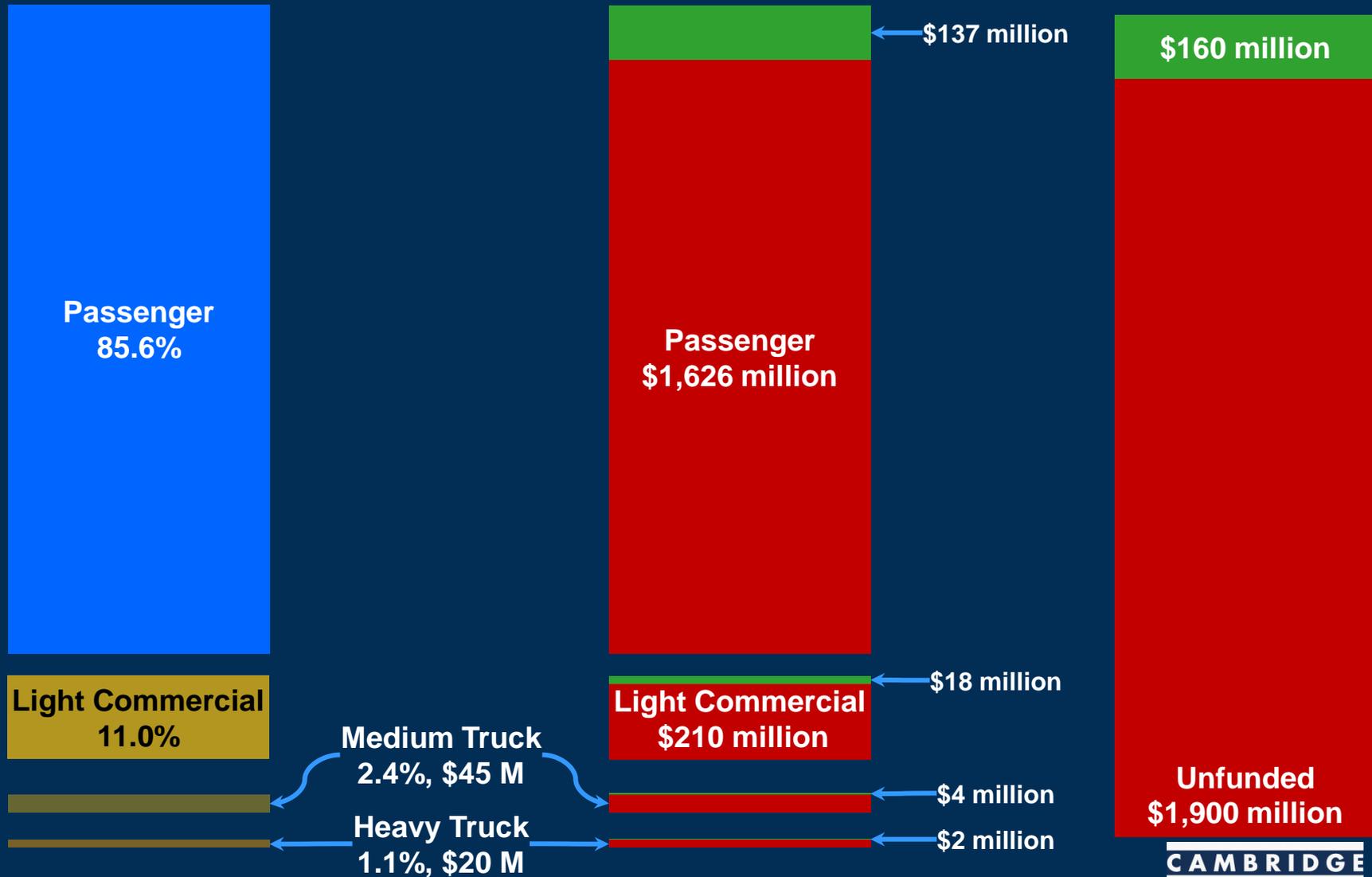
Average Daily Vehicle-Hours of Delay



SR 167 Extension Project Benefits *(Millions of Current Dollars, 2021 - 2050)*



SR 167 Extension Funding Allocation



PRELIMINARY RESULTS

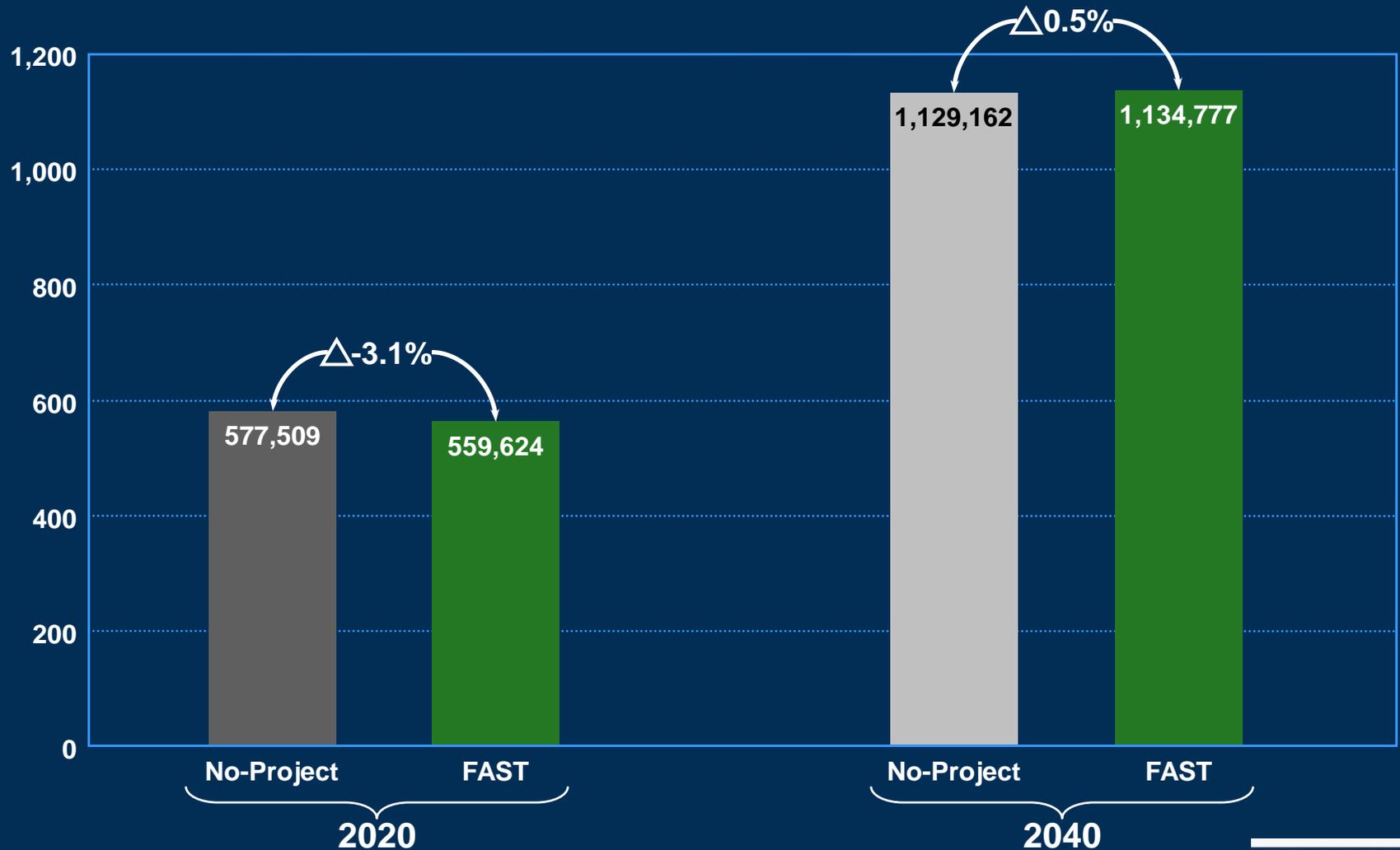
FAST Corridor Unfunded Projects

Grade Separations and Widening

1. North Canyon Rd Extension Grade Separation
2. East Marginal Way Widening
3. South Spokane Widening
4. M St. SE Grade Separation
5. 70th Ave. E & Valley Ave. Widening
6. Lincoln Ave. Grade Separation
7. Lander St. Overpass
8. Willis St. Double Grade Separation
9. S. 228th St. Double Grade Separation & Widening
10. Strander Boulevard Grade Separation & Widening
11. SR 202 Corridor Widening
(FMSIB, not on FAST Corridor)
12. SR 18 Widening
13. I-5 Port of Tacoma Rd. Overcrossing Widening
14. S 212th St. Double Grade Separation
15. 8th St.-UP Grade Separation & Widening
(Deferred)

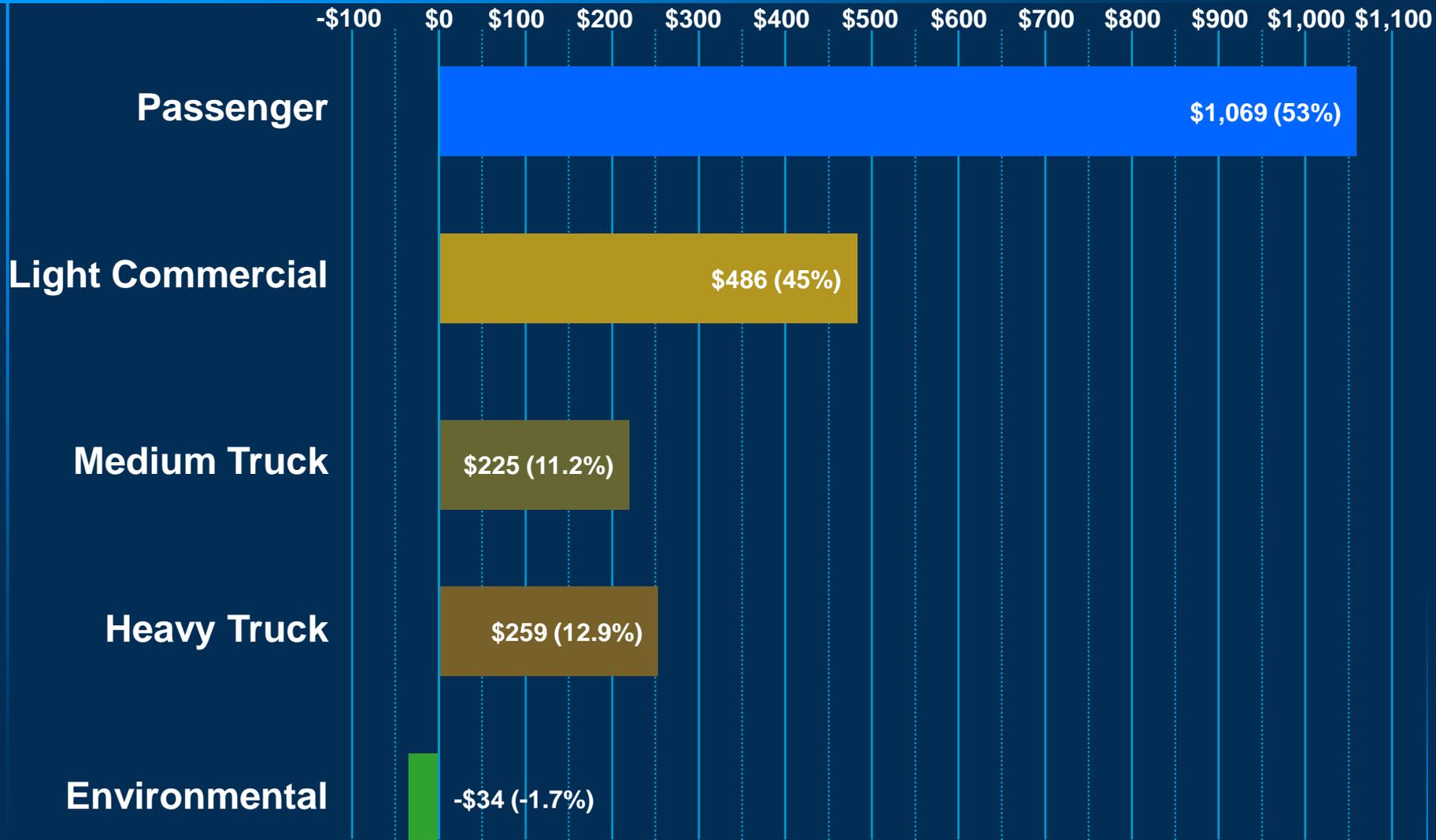
Performance of FAST Corridor Projects

Average Daily Vehicle-Hours of Delay in 2020 and 2040



FAST Corridor Projects

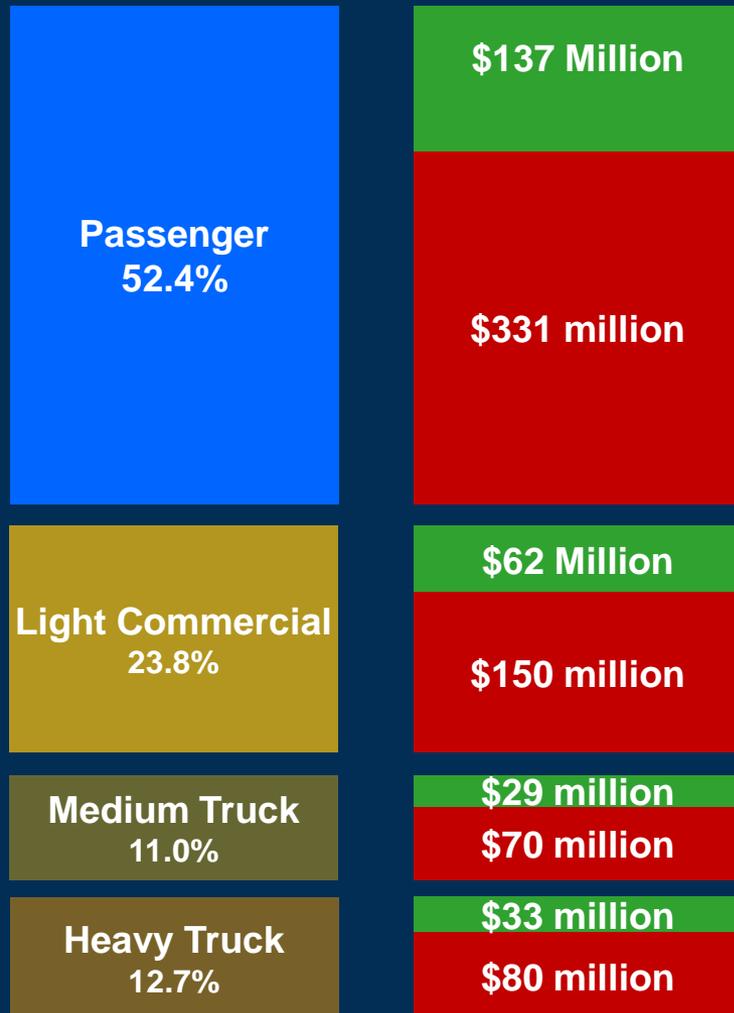
Project Benefits *(Millions of Current Dollars, 2021 - 2050)*



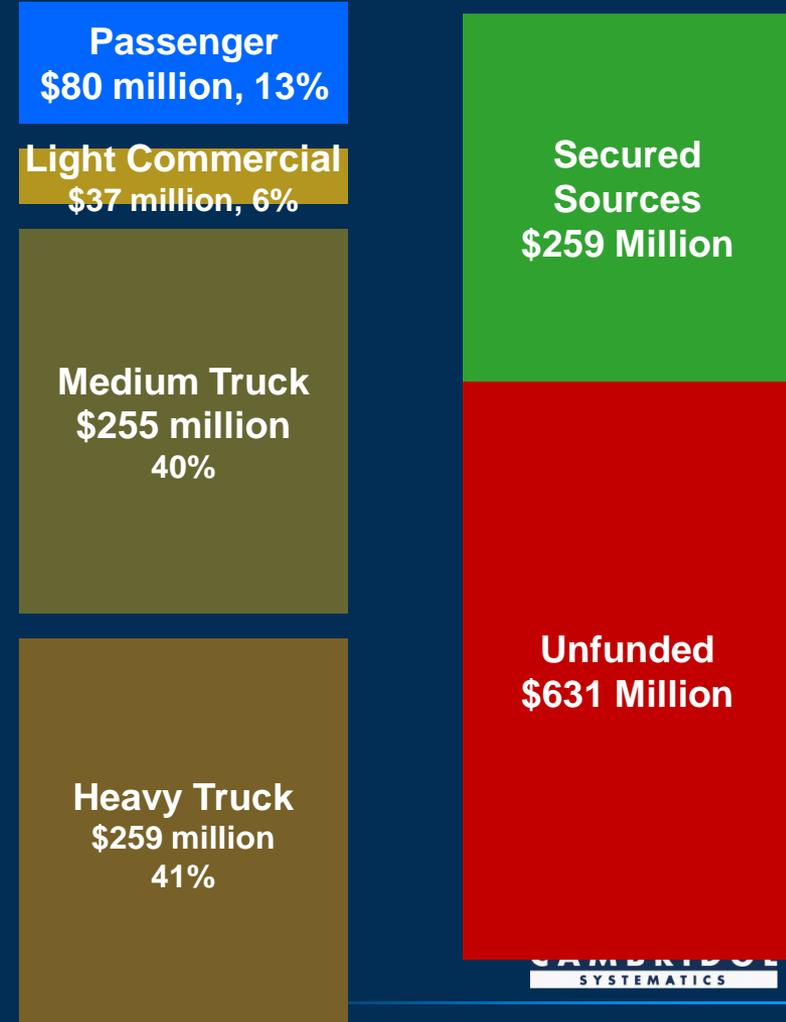
FAST Corridor Projects Possible Funding Scenario

PRELIMINARY RESULTS

Strict Apportionment



Apportionment Based on Benefits to Freight



Preliminary Findings, Consequences, & Policy Options

Benefits

1. **Finding**: For most roadway projects, a majority of the benefits from projects tend to accrue to passenger vehicles, while a smaller share accrues to commercial, light, and heavy trucks (railroad benefits and mitigation were not assessed)
2. **Finding**: In general, the larger the roadway facility, the lower the proportion of benefit accruing to commercial, light and heavy trucks.

Nexus

3. **Finding**: Benefits for heavy trucks often exceed their share of pro-rata benefits, because trucking has fewer alternative travel options than passengers (i.e., less elastic demand)

Preliminary Findings, Consequences, & Policy Options (Continued)

Revenues

4. **Finding:** Funding sources from freight user fees are limited and can not be expected to fund major corridor projects, but are sufficient to provide proportionate funding for smaller projects.
5. **Finding:** Some FAST type projects have significant benefits for freight, although the majority of benefits accrue to passengers.
6. **Finding:** The effects of container fees lower than \$30 per TEU on diversion are unknown
7. **Finding:** Tolling can provide a direct proportionality to benefits; however, tolling feasibility is project specific
8. **Finding:** Mid-term financing for facilities requires continued evaluation of existing tax and fee levels to account for inflation and facility needs

Preliminary Findings, Consequences, and Policy Options: Benefits

- 1. Finding:** For most roadway projects, a majority of the benefits from projects tend to accrue to passenger vehicles, while a smaller share accrues to commercial, light, and heavy trucks (railroad benefits and mitigation were not assessed)
 - 2. Finding:** In general, the larger the roadway facility, the lower the proportion of benefit accruing to commercial, light and heavy trucks.
- **Consequence:** Proportionate funding from trucks will not be sufficient to fund these large projects
 - **Policy question:** Given the mega-project costs, how much can a freight fee be expected to contribute to project financing?
 - **Consequence:** Partial funding from user fees may require a commitment of public sources that reorder project priorities
 - **Question:** Should freight projects priority be influenced by partial funding from freight fees?

Preliminary Findings, Consequences, & Policy Options: Nexus

3. **Finding**: Benefits for heavy trucks often exceed their share of pro-rata benefits, because trucking has fewer alternative travel options than passengers (i.e., less elastic demand)
- **Consequence**: The nexus between freight user fees and funding share may be defined by the monetary amount of the benefits generates for freight users
 - **Policy Option**: Freight user fees could be priced to generate revenues that match benefits to heavy trucks, which would be higher than a strict apportionment of unfunded project costs

Preliminary Findings, Consequences, & Policy Options: Revenues

4. **Finding:** Funding sources from freight user fees are limited and can not be expected to fund large unfunded costs for major corridor projects
5. **Finding:** Many of the FAST Corridor projects and other FMSIB projects have significant benefits for freight, although usually not the majority of benefits
- **Consequence:** Some subset of these projects provide opportunities to implement freight user fees to provide proportionate funding
 - **Policy Option:** *Coordinate implementation of freight user fees with appropriate evaluation and screening of small projects*

Preliminary Findings, Consequences, & Policy Options: Revenues (Continued)

- 6. **Finding**: *The effects of container fees lower than \$30 per TEU on diversion are unknown*
- **Consequence**: A trial container and bulk fee could be tested for any adverse effects of container traffic. If significant diversion occurs, the fee could be lowered or removed
- **Consequence**: The revenue stream from a trial fee could not be bonded, thus funding would be pay-as-you-go
 - **Policy Option**: Given the large public share of unfunded costs for major corridor projects, target freight user fees at smaller projects with significant secured funding sources

Preliminary Findings, Consequences, & Policy Options: Revenues (Continued)

7. **Finding:** Tolling can provide a direct proportionality to benefits; however, tolling feasibility is project specific
 - **Consequence:** Prior studies have shown that tolling can provide a significant project funding and can have a direct proportionality to freight use and benefits
 - **Consequence:** Tolling is not possible or appropriate for all projects due to diversion and other considerations
 - **Policy Option:** Projects should be analyzed for the feasibility of tolling
8. **Finding:** Mid-term financing for facilities requires continued evaluation of existing tax / fee levels to account for inflation and facility needs
 - **Consequence:** The trends for fuel use and the impact of inflation on transportation infrastructure costs will continue to erode existing revenue sources while escalating the costs
 - **Policy Option:** Evaluate in the mid-term, taxes and fees associated with the need for future projects

Next Steps

- **Discussions of proposed nexus-based funding approach**
- **Possible applications to freight projects**
- **Implementation approaches**

Discussion